Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

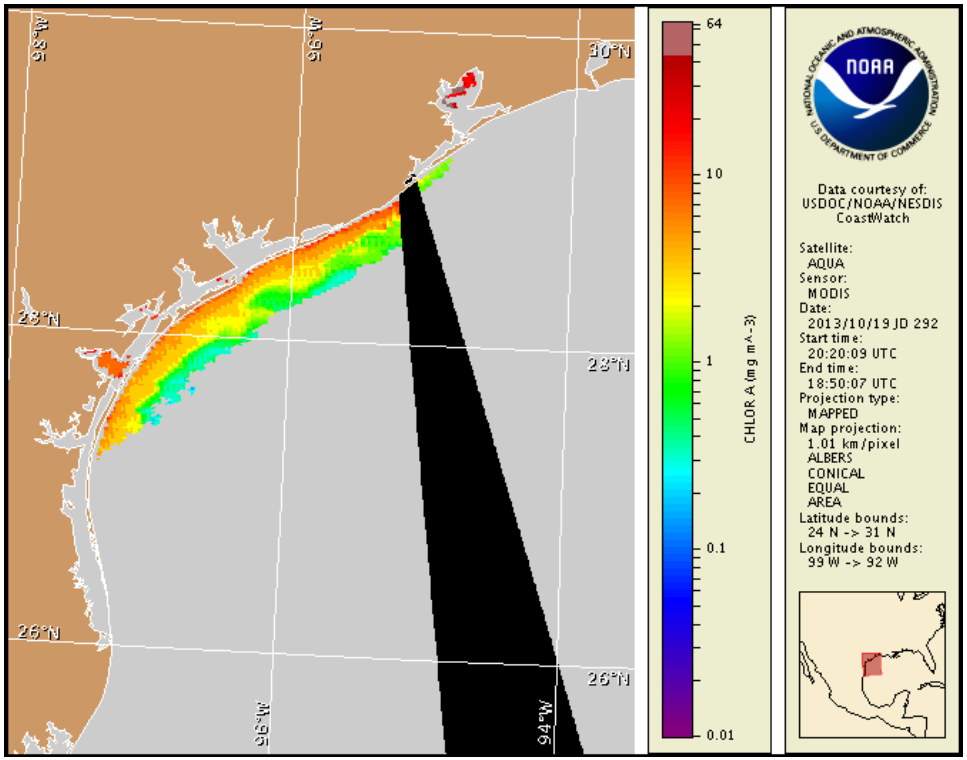
Monday, 21 October 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, October 15, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 11 to 18: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

http://www.tpwd.state.tx.us./landwater/water/environconcerns/hab/redtide/status.phtml

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To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

There is currently no indication of *Karenia brevis* (commonly known as Texas red tide) along the coast of Texas. No respiratory irritation is expected Monday, October 21 through Monday, October 28. Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

There are currently patches of a bloom of the algae *Aureoumbra lagunensis* in the upper Laguna Madre region. This algae species does not produce the respiratory irritation associated with the Texas red tide caused by *Karenia brevis*, but it may cause discolored water and fish kills.

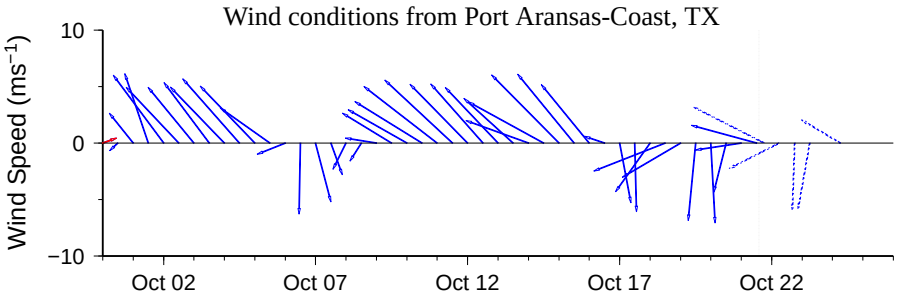
Analysis

There is currently no indication of *Karenia brevis* along the coast of Texas (TPWD; 10/15). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (10/19, shown left) is mostly obscured by clouds along- and offshore the Texas coast from Sabine Pass to San Luis Pass, and from north Padre Island to the Rio Grande, limiting analysis in these regions. Elevated chlorophyll (1-9μg/L) is visible stretching along- and offshore the coast from San Luis Pass to north Padre Island. MODIS Aqua imagery from 10/18 (not shown) indicated only slightly elevated chlorophyll (0-2μg/L) from north Padre Island to the Rio Grande. Elevated chlorophyll is most likely not indicative of the presence of *K. brevis* and is probably due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 100 km south from the Port Aransas region from October 19-24.

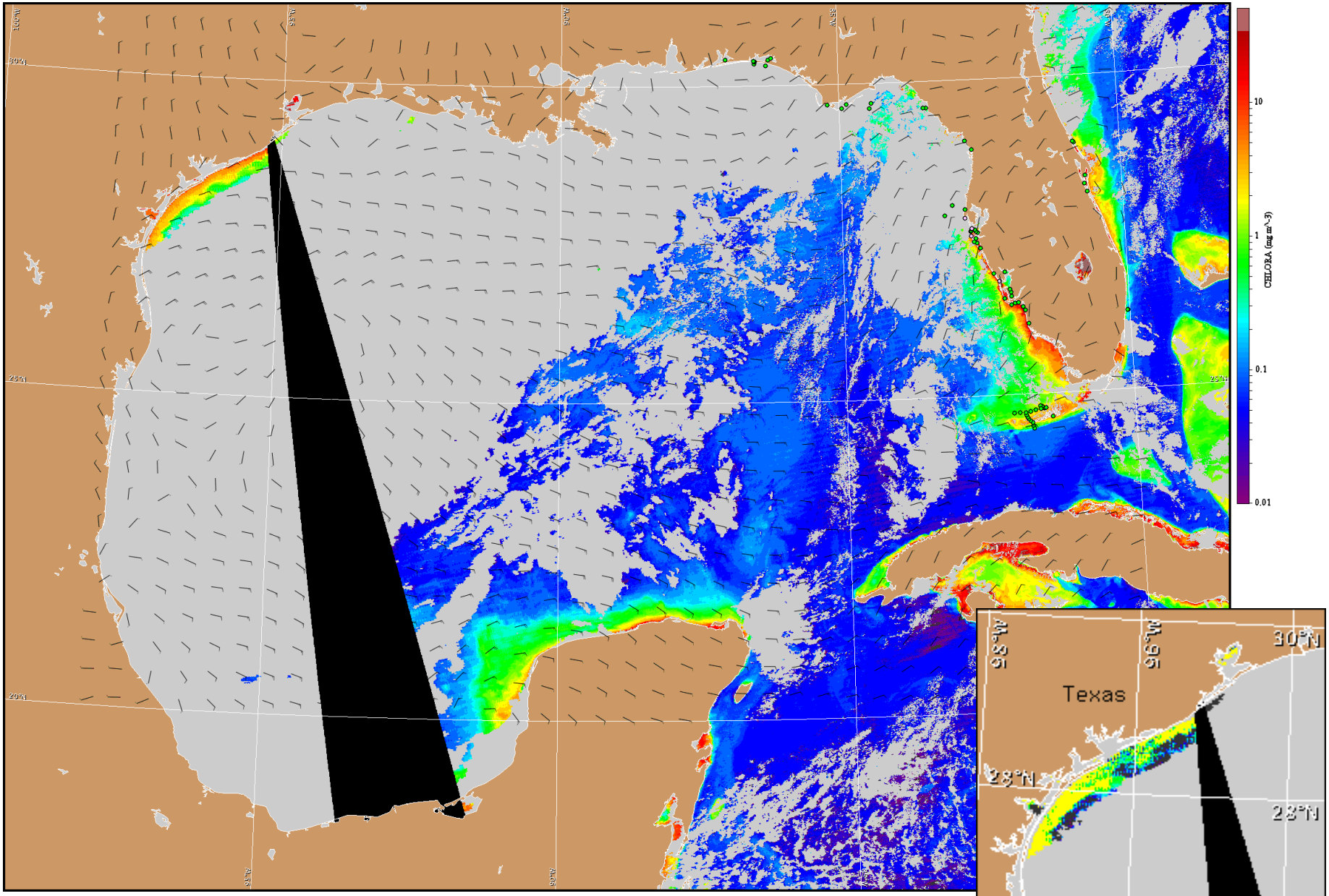
Derner, Davis



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Port Aransas: East winds (10-15kn, 5-8m/s) today becoming northeast (10-15kn) tonight. North winds (10-20kn, 5-10m/s) Tuesday. Northeast winds (10-15kn) Wednesday through Thursday becoming east winds (10-15kn) Thursday night. Northeast winds (10-15kn) Friday becoming east (10-15kn) Friday night.



Satellite chlorophyll image and forecast winds for October 22, 2013 06Z with points representing cell concentration sampling data from October 11 to 18: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).